## INTRODUCING THE NATIONAL WILDLIFE RESEARCH CENTER

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ABSTRACT: The paper summarizes the background and historical events leading to the creation of the National Wildlife Research Center (NWRC) and describes the status of its research program and facilities development in Fort Collins, Colorado. Also, the relationship of the NWRC to the Denver Wildlife Research Center is presented.

KEY WORDS: animal damage control, research, wildlife management, birds, mammals, agriculture.

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I appreciate the opportunity to introduce the National Wildlife Research Center to the 17th Vertebrate Pest Conference.

## BACKGROUND

Adequate research facilities are critical to provide scientific information and to develop methods for resolving problems caused by the interaction of wild animals and society while at the same time maintaining the quality of environments shared with wildlife. Assessments of the Denver Wildlife Research Center (DWRC) in the late 1980's by the Animal and Plant Health Inspection Service (APHIS) and other groups identified inadequate and sub-standard indoor and outdoor animal research facilities. The short-term solution was to cease using facilities that were sub-standard, thus severely limiting the Center's ability to develop alternatives to existing control methods. The General Services Administration (GSA), which has authority over space and facilities presently occupied by the DWRC on the Denver Federal Center (DFC) in Lakewood, Colorado, informed APHIS that outdoor animal facilities are incompatible with the urban real estate development planned for the DFC. Extensive discussions between GSA and APHIS architects determined that renovation of facilities to comply with animal care standards and to meet GSA requirements would be prohibitively expensive and short-lived. GSA would not agree to guarantee the continued use of such facilities beyond five years and requested annual consultations with APHIS to "assess progress of your agency's plans for the eventual removal of the animal holding facilities from the DFC." The outcome of these assessments and discussions was a decision by APHIS and resultant Congressional support to enhance the Center's research capacity and ability to achieve its mission through construction of modern facilities on or near a university campus.

APHIS promptly developed a Master Plan for new wildlife research facilities, and on February 20, 1990, an 80-year land lease was signed with Colorado State University (CSU) for 43 acres on the CSU Foothills Campus in Fort Collins, Colorado. The CSU location offered APHIS a highly suitable, improved research environment for the Center. Congressional appropriations for fiscal years 1990, 1992, 1994, and 1996 provided

funding for the design of all needed structures and for partial construction of animal research facilities.

Because of the Fort Collins location for the new research complex and the pending closure of the DWRC, a new name was needed for the center—a name that would capture its purpose and national, if not international, breadth. A variety of names was considered. The one most favored and subsequently chosen by DWRC employees and APHIS administrators was the National Wildlife Research Center (NWRC).

## HISTORICAL PERSPECTIVE

Research conducted by the Federal government to resolve conflicts between wildlife and human endeavors dates back to 1886 in the early days of USDA's Bureau of Biological Survey. Research on methods of controlling damage by wildlife had its beginning when Dr. A. K. Fisher experimented with various toxicants to control damage to agriculture caused by coyotes, bobcats, jackrabbits, prairie dogs, and other mammals. In 1905, S. E. Piper started field and laboratory experiments with toxicants, traps and other methods for controlling rodents. This activity was headquartered at Albuquerque, New Mexico, for a period before 1920, and in June of that year was transferred to Denver, Colorado, as the Control Methods Research Laboratory.

Investigations of the food habits of wildlife and of some diseases, particularly botulism, that affect wildlife were initiated in the 1920s. These activities became a part of the Food Habits Laboratory which was established in 1931 at Denver to study the food habits and economic relationships of predators and other mammals and birds in the West.

In August 1940, with the merger of USDA's Bureau of Biological Survey and the Bureau of Fisheries to form the new Fish and Wildlife Service (FWS), the two Denver-based laboratories—Control Methods with a staff of ten scientists and Food Habits with a staff of two—were combined to form the Denver Wildlife Research Laboratory. With the reorganization of FWS, as authorized by Congress in 1956, into the Bureau of Commercial Fisheries and the Bureau of Sport Fisheries and Wildlife, the Laboratory expanded and took on added responsibilities. Relationships between wildlife populations and their habitats on public lands, and the

effects of grazing, timber management, and other land uses were new areas of research.

The decade starting in 1958 was a period of growth and change for the Denver laboratory. In 1959, in recognition of the broad responsibilities of the major research stations of the Bureau of Sport Fisheries and Wildlife, the Denver Wildlife Research Laboratory was renamed the Denver Wildlife Research Center. Starting in 1958 with a staff of less than 20 employees, the Center had grown to more than 100 by 1969. Much of this growth was due to the addition by Congress in 1958 of the Pesticide-Wildlife program and to substantial increases in damage control research concerned with birds, forest animals, Hawaiian rats, predators, pocket gophers, nutria, and jackrabbits. Also, in 1967, the Secretary of the Interior and the Administrator of the Agency for International Development, Department of State, signed an agreement providing for an international research program aimed at discovering, developing, and applying new and better ways to protect world food crops from the ravages of rats and other animal pests. The DWRC was assigned responsibility for this world-wide research effort.

During the decade between 1968 and 1978, the research program of the DWRC expanded to include several new investigations on wildlife ecology on public lands and animal damage control. In 1972, cancellation of a number of toxicant registrations that had been important tools for managing some wildlife damage situations, resulted in renewed efforts to develop and register chemical methods for managing wildlife damage under the regulations of the U. S. Environmental Protection Agency.

The breadth of DWRC's research program again expanded significantly in 1980 with the merger of the DWRC and the FWS National Fish and Wildlife Laboratory (NFWL). The NFWL conducted a broad array of vertebrate systematic investigations, ecologic and zoogeographic studies, and marine mammal investigations. During the early-1980s, the DWRC had approximately 210 employees located at its headquarters and at 23 field stations in the United States and in three foreign countries.

In the 1970s and early 1980s it became obvious that maintenance and upgrading of the Center's research facilities were falling behind the changing needs of the agency and that new or renovated facilities would be needed. Changing regulatory requirements as well as scientific and legal standards for conducting research, particularly with captive wild animals, exceeded the Center's capacity to maintain the productive, directed research program that the Animal Damage Control (ADC) and other FWS programs needed. Several modernization initiatives were considered during this period; however, because funds were not appropriated for facility renovation or construction the problem became increasingly critical.

On December 19, 1985, Congress transferred the ADC Program, including the DWRC with only its wildlife

damage research projects, to USDA's APHIS. The ADC Program immediately undertook a number of changes to improve efficiency, decrease administrative costs, and draw the ADC Program elements together into a cohesive unit. DWRC research responsibilities were redefined to place emphasis on maintenance of existing ADC Program tools, development of expanded uses of existing tools, and development of alternative methods for resolving wildlife damage problems. APHIS completed the Master Plan for new wildlife damage research facilities and received its first construction appropriation in fiscal year 1990. Also, in 1990 APHIS and CSU reached agreement on the site for the new research center.

## CURRENT STATUS OF THE NWRC

On September 1, 1993, ground was broken for the first structure of the NWRC, an indoor animal research building. This structure was completed in January, 1995. The first NWRC scientist was assigned in Fort Collins in December, 1994. Other staff quickly followed and by late-1995, 31 employees had been transferred from the DWRC to the NWRC in Fort Collins. Temporary office and laboratory space has been leased in Fort Collins while the permanent office/laboratory structure is being designed by APHIS, to be constructed by CSU's Research Foundation. Ground breaking for this building is scheduled for July, 1996, with occupancy planned for September, 1997. The remaining NWRC components still to be constructed in Fort Collins are the outdoor animal research facilities, the animal research support building, a garage/shop structure, a warehouse building, and a chemical storage building.

Research at the NWRC has expanded rapidly with arrival of the 31 research staff. Investigations include immunocontraceptive approaches for suppressing reproduction in deer, coyotes, rodents and birds; repellents for managing bird and mammal damage; improved capture and restraining systems for predators; integrated management strategies for resolving mammal and bird damage problems; registration of chemicals for wildlife damage applications; control methods for brown tree snakes; applications of geographic information system technology for understanding ecological and agricultural aspects of wildlife damage; and behavioral characteristic of birds and mammals that could lead to new methods for managing damage.

When the NWRC's main office and laboratory building is completed in 1997, the remainder of the DWRC staff in Denver will be transferred to the NWRC in Fort Collins, DWRC field stations will be designated as stations of the NWRC, and DWRC will be closed. The NWRC then will be fully staffed with a focus on research and methods development on new, alternate solutions for resolving wildlife damage problems. I proudly welcome the arrival of the National Wildlife Research Center and what it offers the field of wildlife damage management and the public.